

WHAT IS CLAIMED IS:

1. A method for calculating a multi-point VLAN latency measure, the method comprising:

receiving a plurality of links for a VLAN, each said link having a first side and a second side and including a latency value, a count of access switches on said first side of said link and a count of access switches on said second side of said link;

initializing a latency counter to zero;

for each said link in said VLAN:

 multiplying said count of access switches on said first side of said link by said count of access switches on said second side of said link to derive a count of paths that include said link;

 multiplying said count of paths that include said link by said latency value to derive a total latency for said link; and

 incrementing said latency counter by said total latency value for said link; and

dividing said latency counter by a count of paths in said VLAN to derive said multi-point VLAN latency measure for said VLAN.

2. The method of claim 1 wherein said count of paths is calculated by multiplying a total count of access switches in said VLAN by one less than said total count of access switches in said VLAN and then dividing the result by two.

3. The method of claim 1 wherein said links are received from an operational support system.

4. The method of claim 1 further comprising transmitting a request to an operational support system for said plurality of links for said VLAN, wherein said count of access switches on said first side of said link and said count of access switches on said second side of said link are calculated by said operational support system in response to said transmitting.

5. The method of claim 1 wherein said count of access switches on said first side of said link and said count of access switches on said second side of said link are calculated by an operational support system as part of initializing said VLAN.

6. The method of claim 1 wherein said latency value is updated on a periodic basis.

7. The method of claim 1 wherein said receiving is in response to a user request for said multi-point VLAN latency measure for said VLAN.

8. The method of claim 1 further comprising outputting said multi-point VLAN latency measure.

9. The method of claim 1 further comprising outputting said multi-point VLAN latency measure to a service level agreement system.

10. The method of claim 1 wherein said VLAN is an Ethernet VLAN.

11. A method for calculating a multi-point to multi-point VLAN latency measure, said method comprising:

receiving a plurality of links for a VLAN, each said link including a latency value, a count of access switches on a first side of said link and a count of access switches on a second side of said link; and

calculating a multi-point to multi-point VLAN latency measure for the VLAN responsive to said links.

12. A system for calculating a multi-point VLAN latency measure, the system comprising:

a network;

a host system in communication with said network, said host system including application software to implement a method comprising:

receiving a plurality of links for a VLAN via said network,
each said link having a first side and a second side and including a latency value, a count of access switches on said first side of said link and a count of access switches on said second side of said link;

initializing a latency counter to zero;

for each said link in said VLAN:

multiplying said count of access switches on said first side of said link by said count of access switches on said second side of said link to derive a count of paths that include said link;

multiplying said count of paths that include said link by said latency value to derive a total latency for said link; and
incrementing said latency counter by said total latency value for said link; and

dividing said latency counter by a count of paths in said VLAN to derive said multi-point VLAN latency measure for said VLAN.

13. The system of claim 12 wherein said network is the Internet.

14. The system of claim 12 wherein said network is an intranet.

15. The system of claim 12 further comprising a storage device in communication with said network wherein said plurality of links are stored in said storage device.

16. The system of claim 15 wherein said method further comprises outputting said multi-point VLAN latency measure to said storage device.

17. The system of claim 12 further comprising a user system in communication with said network, wherein said receiving is performed in response to a request from said user system for said multi-point VLAN latency measure for said VLAN.

18. A computer program product for calculating a multi-point VLAN latency measure, the computer program product comprising:

 a storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for facilitating a method comprising:

 receiving a plurality of links for a VLAN, each said link having a first side and a second side and including a latency value, a count of access switches on said first side of said link and a count of access switches on said second side of said link;

 initializing a latency counter to zero;

 for each said link in said VLAN:

 multiplying said count of access switches on said first side of said link by said count of access switches on said second side of said link to derive a count of paths that include said link;

 multiplying said count of paths that include said link by said latency value to derive a total latency for said link; and

 incrementing said latency counter by said total latency value for said link; and

 dividing said latency counter by a count of paths in said VLAN to derive said multi-point VLAN latency measure for said VLAN.